

MEMORANDUM

DATE: November 29, 2000

SUBJECT: American Textile Manufacturers Institute (ATMI)/US Environmental Protection Agency (EPA) MACT Development Meeting for Fabric Printing, Coating, and Dyeing

FROM: Steve York and Alton Peters, RTI

TO: Vinson Hellwig and Paul Almodóvar, EPA/OAQPS/ESD/CCPG

I. Purpose

The purpose of the meeting was to review the status and discuss issues and questions concerning the development of the MACT standard for fabric coating, printing, and dyeing.

II. Date and Place

October 11, 2000
U.S. EPA
N.C. Mutual Building
Durham, NC

III. Attendees

See Attachment 1.

IV. Meeting Summary

Mr. Paul Almodóvar and Mr. Vinson Hellwig of EPA chaired the meeting. Meeting participants discussed the items in a September 25, 2000 letter from ATMI (see Attachment 2). The letter addressed ATMI's concerns regarding MACT development for the fabric coating, printing, and dyeing source category. The following paragraphs summarize the discussions of the general questions, specific questions, and future action items listed in Attachment 2.

General Questions

[FINAL January 8, 2001]

Regarding the schedule for the fabric MACT, EPA noted that proposal is targeted for April 2001, with the final rule scheduled for promulgation 1 year after proposal.

Regarding the question of whether new source MACT will be the same as existing source MACT, EPA responded that for slashing, new and existing source MACT will be the same; for coating, new source MACT will be more stringent; and for dyeing and finishing, new and existing source MACT will probably be the same, though more analysis is needed. Also, regarding the new source definition, EPA noted that the General Provisions to Part 63 define a new source as any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard. Additionally, classification of a new line as a reconstructed line is governed by the definition of reconstruction, i.e., the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost required to construct a comparable new source.

There was a discussion as to whether the MACT would cover area sources. EPA noted that area sources are not anticipated to be covered by the rule. EPA further noted that a source is considered to be an entire facility and that EPA does not require a negative declaration for area sources. EPA added that a source could take limits to operate as a synthetic area source and that records would probably be required to document that HAP emissions do not exceed 10 tons per year (TPY) of a single HAP or 25 TPY of all HAP combined.

ATMI questioned whether inorganics will be regulated under this standard. EPA responded that there have been no indicators that inorganics are being emitted and that the rule is intended at this time to address only VHAP. Regarding recent facility tours by EPA, it was noted that no new questions, concerns, or issues were encountered.

ATMI sought clarification on the actual or potential annual HAP emission level at which EPA considers a facility a significant source of HAPs. EPA noted that the determination is based on potential to emit, and that the level was 10 TPY of a single HAP or 25 TPY of a combination of HAP. EPA also added that facility-wide emissions determine whether a facility is considered a major source as opposed to emissions per separate process (e.g., HAP emissions from dyeing) and that a true area source would not be used in the MACT floor analysis.

Regarding a question whether a source can be split for HAP major source determination by SIC codes, EPA responded that this would not be done since processes are regulated as opposed to SIC codes. ATMI asked whether a coating MACT template had been developed. EPA noted that there is an internal template and that the metal furniture and large appliances MACT standards will follow the template. Each of these standards is scheduled for proposal by the end of the calendar year.

There was a question from ATMI as to whether a model fabric plant would be developed for EPA's economic impact analysis. EPA responded there will be model plants for coating. EPA noted that model plants are not anticipated for slashing because suppliers indicated that there will be no increased

cost for low-HAP PVA. EPA also noted that further data analysis is needed to determine whether model plants would be necessary for dyeing and finishing.

ATMI questioned whether the fabric MACT will reference other MACTs. EPA replied that this would be a stand-alone rule and that it would not reference provisions in other MACTs directly. EPA noted the rule applicability will address overlap issues with the paper and other web coating (POWC) and printing and publishing MACTs.

ATMI questioned whether de minimis levels of 1 percent HAP concentration and 0.1 percent carcinogen concentration were being built into the MACT. EPA stated that HAP content of materials will be limited and facilities will be required to keep purchasing records. EPA also noted that further evaluation was necessary to determine if limits will be set for dyeing or by dye class, etc., and further stated that it had yet to be determined how de minimis HAP material would affect averaging. (Typically a one percent limit of HAP in materials is counted as a zero when averaging of coating materials.) EPA stated that they would try not to subcategorize within dyeing and finishing, because subcategories would limit flexibility since averaging across subcategories cannot be done.

ATMI asked how EPA will address the overall HAP usage versus emissions issue for glycol ethers, metals, and other chemicals. EPA stated that the vendor studies provided by industry had been received and reviewed. Metals were found not to be emitted, but there was insufficient data to draw a conclusion about glycol ethers. There were no data on the cut of the glycol ethers being used that are HAP. ATMI also asked whether EPA has been able to evaluate the impact of the glycol ether definition change on the textile industry. EPA stated that there were no data to evaluate any possible change and suggested that the information has to come from vendors. ATMI also asked how EPA would use information on the breakdown of glycol ether usage within the industry if such information was available. EPA replied that this information would be used to estimate HAP emissions and to determine the major/minor source status of facilities.

In addition, EPA noted that in the absence of detailed information including Henry's Law constants and process conditions, it would be assumed that all glycol ether is HAP and is emitted.

ATMI questioned the current status of the methanol delisting petition. EPA noted that the petition was on hold now and that it will probably be 2 to 3 months before there is any movement. ATMI also asked how sources that are not considered significant contributors of HAP will be addressed. EPA replied that true area sources would not be subject to the rule and that the rule would not apply to facilities with no process operations in the defined subcategory affected facilities.

Regarding ATMI's question concerning how carpet facility data were being used, EPA noted that based on data received, only two carpet mills have major source potential to emit HAP. For one of these facilities, the process that puts them over area source status is dyeing; for the second facility the process is back coating. EPA is evaluating whether to cover carpet dyeing, possibly as a subcategory, or to let carpet processes go to a case-by-case determination. It appears, however, there is no reason

to separate carpet manufacturing processes from the textile subcategories.

ATMI asked what the Agency's plan is to address the "once in, always in" rule. EPA responded that at the present time, there is no change but that discussion of this rule is ongoing. EPA noted that if a HAP delisting has a big impact, the standard might be amended or a clarification notice might be published. If a facility is no longer major because of a delisting, it may just be required to keep records of material use.

ATMI raised the issue of a boiler being sold to a separate company that manages and operates the boiler. The boiler would not be under common ownership and presumably would not be considered in the major source determination under Title V. ATMI posed two possible situations, one in which all of the steam produced is used onsite and the second in which some of the steam goes into a grid for sale to facilities at other sites. EPA will check with Agency legal counsel about these situations and respond to ATMI.

ATMI asked if existing major HAP sources will have three years after the MACT is final to avoid the standard or become compliant. EPA noted that at this time that is correct. ATMI questioned the timelines for the various notifications required under the MACT rule. EPA replied that initial notification was to be no later than 1 year after promulgation, that compliance certification could take place up to 30 days following the initial compliance period, and that notifications for new or modified sources could take place 120 days after startup or the effective date of the subpart, whichever is first.

ATMI asked what existing or upcoming MACT is the best template for the textile rule. EPA suggested that the metal furniture and large appliance rules would be examples of the types of options that would be provided in the textile rule.

ATMI asked whether mixing, cleaning, research and development, and wastewater treatment will be specifically addressed in the preamble as having no MACT requirements. EPA responded that work practices would likely address storing and mixing in all subcategories as well as cleaning for the coating subcategory. EPA further noted that wastewater would have no requirements at the present time because there are no data to support limits and that research and development would not be covered.

ATMI asked how unique, one-of-a-kind processes or situations would be handled under the MACT. EPA noted that they would be treated as all other operations in the subcategory, with no provision for special treatment, or on a case-by-case basis if they do not fit into a subcategory. ATMI also asked if the industry's approach to confidential business information (CBI) in collecting dyeing data has been appropriate. EPA replied that their approach to using the same template for finishing as for dyeing was appropriate and noted that emissions data cannot be held confidential.

There was a question from ATMI concerning facilities that may possibly make transitions from area sources to major sources. EPA noted that such facilities would have a year to come into compliance

and 180 days to demonstrate compliance.

ATMI asked that, if it could be determined which textile facilities planned to be major sources, could the MACT rule focus on them alone. EPA replied that the schedule needed to be adhered to as closely as possible, and noted that true area sources are not considered in the MACT floor determination.

There was also some discussion concerning test methods. EPA noted that standard EPA methods and ASTM methods are being referenced in other coating rules. EPA further noted that State VOC rules applying to fabric coating have been analyzed. Another question was raised by ATMI concerning 12-month averaging. EPA noted that there is some seasonal variation in the apparel industry, but that additional data would be needed to support the need for an annual averaging period. EPA also noted that with a longer averaging time, there is a greater risk of being out of compliance, and that potentially the emission limits could be tighter.

Specific Issues and Questions

ATMI asked why EPA initially selected the fabric MACT subcategory breakdown as 1) slashing, 2) coating, and 3) dyeing, finishing, and printing. EPA replied that slashing was broken out based on the data presented; coating was broken out because there were similar emissions from different coating processes; and dyeing, printing, and finishing seem to be done at the same facilities with the same equipment. There was also discussion of the affected source. EPA noted that the affected source would be all lines in a subcategory in the facility as this allows averaging across lines. ATMI noted that a facility that only dyes or finishes can't as readily average materials with high and low HAP contents.

There was a question from ATMI about the format of the standard. EPA replied that the format would be either lb HAP/lb of product or a content limit expressed as lb HAP/lb coating material. There was some discussion about averaging across all materials used at a facility. EPA submitted that it would be easier to average everything since the floor would be based on everything. EPA also noted that materials with less than 1 percent HAP or 0.1 percent carcinogen would count as zero HAP and that this should be written into the rule as was done in the Wood Furniture MACT. ATMI pointed out that basing the floor only on HAP-containing materials would perhaps penalize the facilities that have taken more pollution prevention measures. ATMI also questioned how a dye range and a finishing range processing the same fabric would be accounted for with the lb HAP/lb fabric format. It was agreed that it may be cleaner to limit HAP content in materials as purchased using the lb HAP/lb coating material format.

ATMI asked whether the concept of planks would be used to support averaging. EPA noted that planks were being considered at an earlier time but that there was not enough data at the present time to incorporate them. EPA further noted that for planks there have to be differences in processes, e.g., different application methods and suggested that after proposal the industry could submit data making the case for planks. ATMI also asked why POWC was chosen as the applicable rule for sources

running multiple substrates. EPA noted that it fit the Agency's definition of web coating and that POWC facilities coat a lot of different types of substrates.

ATMI asked whether EPA is considering going above the floor for any subcategory. EPA replied that going above the floor for dyeing and finishing is being considered due to a lack of data, but that with data supporting a floor, there would be no need to look above the floor. ATMI questioned whether the floor for slashing would be set at less than or equal to 1 percent HAP content in PVA. EPA responded that the limit was anticipated to be established as such with the compliance demonstration consisting of keeping purchasing records.

ATMI asked what the basis for the 96 percent HAP reduction MACT floor for coating is and how coating is being defined. EPA replied that it had confirmed that some sources in the floor are using permanent total enclosures for 100 percent capture and that the MACT floor could be as high as 97 percent. EPA further noted that the sources in the floor use thermal oxidizers or carbon adsorption systems and permanent total enclosures. EPA also stated that coating will be defined in the MACT and that the definition will probably be based on material being applied to a substrate surface as opposed to impregnating the substrate. Regarding the inclusion of thread bonding as a part of the coating subcategory, EPA stated that thread bonding is already covered by 40 CFR part 60, subpart VVV and that there is no reason to exclude it.

ATMI asked if continuous emissions monitoring systems (CEMS) would be required if a control device is used. EPA noted that it is anticipated that the rule will allow for parametric monitoring or CEMS.

There was discussion concerning emissions from pressurized dyeing processes. EPA questioned whether the process is vented to the atmosphere when a batch is completed. ATMI indicated that the dye bath is cooled to release pressure and then drained before opening the dye machine, and that there are no releases of volatiles to the atmosphere.

ATMI questioned whether a start-up, shutdown, and malfunction (SSM) plan would be required whenever an add-on control device is used for compliance and whether a SSM plan would be required when a compliant coating option is used. EPA noted that a SSM plan would be necessary for the add-on control device, and therefore would not be required for compliant coating use.

Future Action Items

There was a discussion concerning survey data use. EPA noted that the initial survey data could not be used without the facilities being identified and there is not time to wait for the facility identifications. There was agreement that the more recent dyeing data should be better than the initial survey data. EPA noted that the dyeing data seem to be representative of the industry in terms of size of companies and geographic distribution. ATMI stated that the finishing data would be supplied within two weeks and EPA agreed to use the finishing data if provided within 2 weeks. ATMI asked if more information

was needed about printing. EPA noted that further data could be provided during the comment period after proposal.

ATMI asked if the proposal would be available for ATMI review before being made available to the public. EPA replied that the entire industry should have the same information and that questions could not be responded to before proposal. EPA noted further that particularly during the comment period, meetings cannot be held with the stakeholders; everyone must have the same information.

ATTACHMENT 1

List of Attendees for October 11, 2000 ATMI/EPA Meeting Regarding the Fabric Printing, Coating, and Dyeing MACT Standard

Attendee	Affiliation
Paul Almodóvar	USEPA
Ron Beegle	Mt. Vernon Mills, Inc.
David Dunn	Environmental Resources Management
Julie Fleming	ATMI
Vinson Hellwig	USEPA
Alton Peters	RTI
Jimmy Summers	Guilford Mills, Inc.
Steve York	RTI